EXHIBIT C

Sarah Collins, M.D.

Northwestern Medicine
Department of Obstetrics and Gynecology
<u>Division of Female Pelvic Medicine</u> and Reconstructive Surgery



ACADEMIC APPOINTMENTS

August 2011-May 2016: Assistant Professor of Obstetrics & Gynecology,

University of Chicago Medicine

June 2016- present: Assistant Professor of Obstetrics & Gynecology and Urology

Northwestern Medicine

ACADEMIC TRAINING

1993-1997	B.A., English Literature. Cornell University, Ithaca, NY
1997-1998	M.S., Basic Medical Sciences. Wayne State University, Detroit, MI
1999-2003	M.D., Wayne State University School of Medicine, Detroit, MI
2003-2007	Residency, Obstetrics and Gynecology, Case Western Reserve University /
	MetroHealth / Cleveland Clinic, Cleveland, OH
2007-2008	Fellowship, Female Pelvic Medicine and Reconstructive Surgery, Montefiore
	Medical Center, Albert Einstein College of Medicine, Bronx, NY
2008-2011	Fellowship, Female Pelvic Medicine and Reconstructive Surgery, Hartford Hospital / University of Connecticut Health Center, Hartford, CT
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BOARD CERTIFICATION

2009 American Board of Obstetrics and Gynecology 2013 Female Pelvic Medicine and Reconstructive Surgery

SCHOLARSHIP

- (a) <u>Peer-reviewed publications in the primary literature, exclusive of abstracts:</u>
- Collins SA, Joshi G, Quiroz LH, Steinberg AC, Nihira MA. Pain Management Strategies for Urogynecologic Surgery: A Review. Female Pelvic Medicine and Reconstructive Surgery 2014 20(6): 310-15
- 2. Collins SA, Beigi R, Mellen C, O'Sullivan DM, Tulikangas PK. The effect of pessaries on the vaginal microenvironment. *American Journal of Obstetrics and Gynecology*, available online 2015 212(1): 60e.1-60e.6
- 3. Hsieh J, Collins SA, Morosky C. Periurethral Smooth Muscle Tumor of Undetermined Malignant Potential. *Case Reports in Obstetrics and Gynecology*. Volume 2012 (2012), Article ID 546854, doi:10.1155/2012/546852.

- 4. Collins SA, O'Sullivan DM, Tulikangas PK. Effect of surgical approach on physical activity and pain control after sacral colpopexy. *American Journal of Obstetrics and Gynecology* 2012 206(5): 438e.1-6.
 - a. Cited in: Falcone T. What is New in Minimally Invasive Surgery?: Best Articles from the Past Year. *Obstetrics & Gynecology*. 2012 120(4): 952-53
- 5. Collins SA, O'Sullivan DM, LaSala CA. Correlation of POPQ posterior compartment measures with defecatory dysfunction. *International Urogynecology Journal*. 2011 23(6): 743-7.
- 6. Collins SA, O'Sullivan DM, Tulikangas PK. Surgeon activity in robotic versus abdominal gynecologic surgery. *Journal of Robotic Surgery*. 2012 6:333-36
- 7. Collins SA, Tulikangas PK, LaSala CA, Lind LR. Complex Sacral Abscess 8 Years After Abdominal Sacral Colpopexy. *Obstetrics & Gynecology*. 2011 118 (2 Pt 2): 451-54.
- 8. Collins SA, O'Sullivan DM, Steinberg AC. Effect of Flatal Incontinence on Sexual Function. *Female Pelvic Medicine and Reconstructive Surgery*. 2011 17(2): 70-73.
- 9. Kane S, Collins SA, Sproat L, Mangel J. Predictors of transfusion requirement among patients who undergo hysterectomy for benign disease. *Journal of Gynecologic Surgery*. 2012 28(2): 113-15.
- 10. Collins SA, Tulikangas PK. Randomized trials in robotic surgery: a practical impossibility? *International Urogynecology Journal*. 2010 21(9): 1045-47.
- 11. Collins SA, O'Sullivan DM, LaSala CA. Factors associated with PISQ-12 completion in an academic urogynecology population. *International Urogynecology Journal*. 2010 21(5):579-82.
- 12. Steinberg AC, Collins SA, O'Sullivan DM. The impact of flatal incontinence on quality of life. *American Journal of Obstetrics and Gynecology.* 2009 201(5):539.e1-3
- 13. Collins SA, Downie SA, Olsen TR, Mikhail MS. Nerve Injury during Uterosacral Ligament Fixation: A Cadaver Study. *International Urogynecology Journal*. 2009 20(5): 505-508
- 14. Sandhu KS, Chua RG, Zhang X, Kanika ND, Collins SA, Mikhail M, Melman A, Disanto ME. Regional heterogeneity in the expression of the sphingosine-1-phosphate pathway in the female rat lower urinary tract. *American Journal of Obstetrics and Gynecology*. 2009 200(5):576e1-7
- 15. Chen CCG, Collins SA, Rodgers AK. Perioperative complications in obese women undergoing vaginal surgery compared with normal weight women. *American Journal of Obstetrics and Gynecology*. 2007 197(1):98.e1-8.
- 16. Collins SA, Jelovsek JE, Chen CCG, Gustilo-Ashby AM, Barber MD. De novo rectal prolapse after obliterative and reconstructive vaginal surgery for urogenital prolapse. *American Journal of Obstetrics and Gynecology*. 2007 197(1):84.e1-3.
- 17. Rillema JA, Collins SA, Williams CH. Prolactin Stimulation of Iodide Uptake and Incorporation into Protein is Polyamine-Dependent in Mouse Mammary Gland. *Experimental Biology and Medicine*. May 2000, Vol. 224, No. 1, 41-44

(b) Presentations at national conferences:

- Pandya LK, Collins SA. Outcomes of Urogynecologic Evaluations of Women Referred for Rectocele on Dynamic Proctography. Poster presentation, AUGS/IUGA 2014, Washington, DC
- 2. Collins SA, Steinberg AC. Robotic-Assisted Laparoscopic Trachelectomy. Scientific Video Poster, AAGL 2011, Hollywood, FL
- 3. Collins SA, Beigi RH, Mellen C, O'Sullivan DM, Tulikangas PT. Differences in the vaginal microenvironment between women who do and those who do not wear pessaries. Oral poster presentation, AUGS 2011, Providence, RI

- 4. Collins SA, O'Sullivan DM, Tulikangas PT. Pain after robotic versus abdominal sacral colpopexy. Poster presentation, AUGS 2011, Providence, RI
- Collins SA, O'Sullivan DM, LaSala CA. Correlation of POPQ posterior compartment measures with defecatory dysfunction. Oral presentation, SGS 2011, San Antonio, TX
- 6. Collins SA, O'Sullivan DM, Tulikangas PK. The effect of surgical approach on postoperative return to baseline physical activity in women undergoing sacral colpopexy. Oral poster presentation, SGS 2011, San Antonio, TX
- Collins SA, O'Sullivan DM, Tulikangas PK. Surgeon Activity and energy expenditure in robotic versus abdominal gynecologic surgery. Poster presentation, AUGS 2010, Long Beach, CA
- Collins SA, O'Sullivan DM, Tulikangas PK. Subject baseline demographic and medical characteristics in randomized trials of anticholinergic medications, 1990-2010. Poster presentation, AUGS 2010, Long Beach, CA
- 9. Martin M, Collins A, O'Sullivan DM, Steinberg AC. The Impact of Flatal Incontinence on Sexual Function. AUGS 2010, Long Beach, CA
- 10. Collins SA, Tulikangas PK. Robotic sacral colpopexy after vaginal hysterectomy. (Video) Podium presentation, SGS 2010, Tucson, AZ.
 - a. Featured in the Surgical Film Festival library.
- 11. Kane S, Collins SA, Sproat L, Mangel J. Predictors of transfusion requirement among patients who undergo hysterectomy for benign disease. Oral poster presentation, SGS 2010, Tucson, AZ
- 12. Collins SA, O'Sullivan DM, LaSala CA. Factors associated with failure to complete the PISQ-12 in an ambulatory urogynecology population. Poster, AUGS 2009, Hollywood, FL
- 13. Collins SA, Wagner JR, Tulikangas PK. Repair of ureteral injury: the robotic approach. (Video) Podium presentation, AUGS 2009, Hollywood, FL
- 14. Steinberg AC, Collins SA, O'Sullivan D. The Impact of Flatal Incontinence on Quality of Life. Poster. SGS 2009, New Orleans, LA
- 15. Collins SA, Downie SA, Olson TR, Mikhail MS. Histological Evaluation of the Uterosacral Ligament: Do Elastin, Collagen, and Smooth Muscle Content Decrease with Increasing Age? Poster, AUGS 2008, Chicago, IL
- 16. Collins SA, Downie SA, Sellers RS, Olson TR, Mikhail MS. Nerve Injury during Uterosacral Ligament Fixation: A Cadaver Study. Poster, AUGS 2008, Chicago, IL
- 17. Collins SA, Chua R, Kanika N, Tar M, Sandhu KS, DiSanto M. The Sphingosine-1-Phosphate pathway is upregulated in the rat vagina after ovariectomy. Moderated poster presentation, American Urologic Association 2008, Orlando, FL
- 18. Collins SA, Jelovsek JE, Chen CCG, Gustilo-Ashby AM, Barber MD. De novo rectal prolapse after obliterative and reconstructive vaginal surgery for urogenital prolapse. Podium presentation, American Urogynecologic Association (AUGS) 2006, Palm Springs, CA
- Chen CCG, Collins SA, Rodgers AK. Perioperative complications in obese women undergoing vaginal surgery compared with normal weight women. Podium Presentation, AUGS 2006, Palm Springs, CA

FUNDING

(a) Past:

1. SG-129512, Hartford Hospital Small Grant. My role: PI. Title: Perioperative exercise tolerance and pain control in women undergoing robotic versus traditional

- abdominal sacral colpopexy. Award amount: \$10,000.00. Project period: 2/1/09-2/1/11.
- 2. SG-123550, Hartford Hospital Small Grant. My role: PI. Title: Changes in the microscopic vaginal environment caused by pessary use in urogynecology patients. Award amount: \$10,000.00. Project period: 5/1/10-2/20/12.
- 3. The Bucksbaum Institute for Clinical Excellence 2013 Pilot Grant. My role: PI. Title:
 Predictors of satisfaction with surgical decision-making in elderly women
 undergoing gynecologic surgery. Award amount: \$4300.00. Project period: June,
 2013-April, 2015
- 4. University of Chicago Institute for Translational Medicine (ITM) Pilot Awards: Clinical and Translational Human Subjects Studies. My role: PI. Title: Do vaginal biomechanical properties correlate with tissue composition in women with and without pelvic organ prolapse?. Award amount: \$40,000. Project period January 2016 – June 2016, award forfeited when I left institution

HONORS, PRIZES, AND AWARDS

- 2013-2015 Bucksbaum Institute for Clinical Excellence, Associate Junior Faculty Scholar, nominated March, 2013
- 2006-2007 Administrative Chief Resident, MetroHealth / Cleveland Clinic Obstetrics and Gynecology residency program
- 2005 Bayer Teaching Award, MetroHealth / Cleveland Clinic Obstetrics and Gynecology residency program
- 1993-94 Cornell University, School of Arts and Sciences Dean's List

INVITED SPEAKING

- 2015 Pelvic Organ Prolapse and Urinary Incontinence in Women, Munster Community Hospital, October 21, 2015
- 2015 From Core to Pelvic Floor. Exhale Spa, Chicago, IL. March 13, 2015
- 2015 Learning at the Forefront: Pelvic Organ Prolapse in Women: diagnostic and treatment considerations; Surgery for Urinary Incontinence in Women
- 2014 Physical therapy for pelvic floor disorders: advantages over the alternatives. Athletico University, October 4, 2014
- 2014 Mesh Materials in Urogynecology: The Good, the Bad, and the Ugly. Chicago Lying-in Ex-Residents Society (CLIER), September 13, 2014
- 2014 From Core to Pelvic Floor. Exhale Spa, Chicago, IL. July 11, 2014
- 2014 Urinary urgency, frequency, and nocturia in elderly women, MacNeal Hospital Department of Family Medicine Grand Rounds, June 4, 2014
- 2014 Break Free From Pelvic Floor Disorders. Munster Community Hospital, May 28, 2014
- 2013 Urinary Incontinence in Women: Surgical Options. Urology Nursing Society 2013 meeting, Chicago, IL
- 2013 Pelvic Organ Prolapse in Women: Diagnostic and Treatment Considerations. Women's and Men's Health Symposium, Community Healthcare System, Munster, IN.

INVITED, ELECTED, OR APPOINTED EXTRAMURAL SERVICE

- 2016-present Abstract Review Committee, Society of Gynecologic Surgeons, in preparation for the 2017 annual meeting of the Society of Gynecologic Surgeons
- 2016-present Liaison member, Terminology Committee, the American Urogynecologic Society 2016 Faculty, SGS 25th Annual Postgraduate Course, vaginal and laparoscopic

	surgery
2016	Faculty, Perinatal Resources, Inc. Obstetrics and Gynecology Board Review
	Course, Orlando, FL and Columbus, OH
2016	Faculty, American Urogynecologic Society FPMRS Fellows' hands-on robotic
	Sacrocolpopexy course, May 25-27, 2016, Orlando, FL
2015-present	Member, Clinical Practice Committee, the American Urogynecologic Society
2013, 2016	Invited volunteer abstract reviewer for the 2013 and 2016 annual scientific
	meetings of the American Urogynecologic Society
2011-present	Peer reviewer for manuscripts submitted to the following journals: American
	Journal of Obstetrics and Gynecology, Neurourology and Urodynamics,
	International Urogynecology Journal

PROFESSIONAL SOCIETIES

<u>Elected or invited membership:</u> Society of Gynecologic Surgeons

Other:

American Congress of Obstetricians and Gynecologists American Urogynecologic Society American Academy of Gynecologic Laparoscopists

EDUCATION

Northwestern Feinberg School of Medicine (M.D.):

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2017 Reproductive / Genitourinary lecture: Pelvic Floor Disorders in Women

(b) Clinical

2016-present Outpatient clinic, surgical education: weekly supervision of one M3 student on

the Obstetrics and Gynecology clinical rotation

Graduate medical education (residency and clinical fellowships):

<u>Graduate medical education (residency and clinical fellowships).</u>		
(a) Didactic		
Nov. 5, 2014	Didactic presentation to the Female Pelvic Medicine and Reconstructive Surgery Fellows at the University of North Carolina: Masses of the anterior vaginal wall	
2012-2016	Pelvic Anatomy and Surgical Skills Course for Obstetrics and Gynecology residents, The University of Chicago Medicine	
2011-2016	Two lectures annually as part of the University of Chicago Medicine Obstetrics and Gynecology Residency Lecture Series: Lower urinary tract injury in Gynecologic Surgery Urinary tract infections	
2011-2016	Three presentations for surgical anatomy and/or surgical skills training for Obstetrics and Gynecology residents at the University of Chicago Medicine: Surgical anatomy of the anterior abdominal wall Basic diagnostic cystoscopy using a watermelon model	
2011-2016	One lecture annually to Female Pelvic Medicine and Reconstructive Surgery Fellows in the NorthShore / University of Chicago Fellowship training program: Masses of the anterior vaginal wall Vaginal vault suspension procedures Vulvar dystrophies	

Occult stress incontinence

(b)	Clinical
2016-present	Outpatient clinic, surgical training of Female Pelvic Medicine and Reconstructive
	Surgery fellows at Northwestern Medicine, 3 days weekly
2016-present	Outpatient clinic, surgical training of Obstetrics and Gynecology Residents,
	Northwestern Medicine
2011-2016	Outpatient clinic, surgical procedure training, and supervision of 1 fellow from the
	NorthShore / University of Chicago fellowship training program in Female Pelvic
	Medicine and Reconstructive Surgery Fellows, 1 month per year
2011-2016	Daily rounding with the resident team on Gynecology service during the 4-8
	weeks per year on service, the University of Chicago Medicine
2011-2016	Outpatient clinic, surgical procedure training, and supervision of 3 rd and 4 th year
	residents rotating on the Urogynecology service, The University of Chicago
	Medicine

Continuing medical education:

- 2015 Pelvic Organ Prolapse: Diagnostic and Treatment Considerations. Munster Community Hospital Grand Rounds, May 11, 2015
- 2014 Mesh Materials in Urogynecology: The Good, the Bad, and the Ugly. Chicago Lying-in Ex-Residents Society (CLIER), September 13, 2014
- 2014 Urinary urgency, frequency, and nocturia in elderly women. MacNeal Hospital Family Medicine Department Grand Rounds, June 4, 2014
- 2013 Urinary Incontinence in Women: Surgical Options. Urology Nursing Society 2013 Meeting, Chicago, IL
- 2013 Pelvic Organ Prolapse in Women: Diagnostic and Treatment Considerations. Women's and Men's Health Symposium, Community Healthcare System, Munster, IN.
- 2012 Mesh materials in urogynecology: The good, the bad and the ugly. Grand rounds, Department of Obstetrics and Gynecology, University of Chicago Medicine